

CLAIMS

- 5 1. Method for the preparation of a silicic acid comprising extrudate, comprising the steps of:
- i) forming of stabilized silicic acid, by hydrolysing a silicon compound into orthosilicic acid and/or oligomers thereof in the presence of a stabilizing agent, which is a quaternary ammonium compound, or an amino-acid, or an amino acid source or
- 10 combinations thereof;
- ii) mixing of the stabilized silicic acid with a carrier in an amount upto the loading capacity of the carrier for silicic acid; and
- iii) extruding the resulting mixture thereby forming the extrudate.
2. Method according to claim 1, wherein silicic acid is orthosilicic acid
- 15 and/or oligomers.
3. Method according to claim 1-2, wherein the quaternary ammonium compound is choline chloride
4. Method according to claim 1-2, wherein the amino-acid is proline, serine, lysine, arginine, glycine or combinations thereof.
- 20 5. Method according to claim 1-2, wherein the amino acid source is a polypeptide or a protein hydrolysate.
6. Method according to claim 1-5, wherein the stabilized silicic acid comprises a silicon content of 2.5-3.5% by volume, a choline content of 65-75% by weight and a water content of 15-25% by weight
- 25 7. Method according to claim 1-6, wherein the carrier is mixed with the stabilised silicic acid in a ratio of 65-50 % and 35-50 % respectively.
8. Method according to claim 1-7, wherein the carrier is cellulose or a derivatives thereof such as microcrystalline cellulose, hydroxypropylcellulose, hydroxypropylmethylcellulose, carboxymethylcellulose, and cellulose gum and/or
- 30 other carriers or combinations selected from sugars such as lactose, pectines and alginates, poly- and oligosaccharaides such as malto-dextrine, glucans and derivatives thereof, starch and derivatives thereof, and natural and semi-synthetic fibers, protein and protein hydrolysates.

9. Method according to claim 1-8, wherein the carrier is microcrystalline cellulose and the loading capacity for stabilised silicic acid is < 50 %.

10. Method according to claim 1-9, wherein the extrudate is spheronized into particles

5 11. Method according to claims 1-10, wherein the particles are dried, preferably having a particle size between about 800 to about 1200 µm.

12. Extrudates obtainable with the method according to claims 1-11.

10 13. An extrudate according to claim 12 for use in the production of animal feed, feed supplement, human food and/or food supplement and of a pharmaceutical or cosmetic preparation, and for the treatment of infections, nails, hair, skin, teeth, collagen, connective tissue, bones, osteopenia, cell generation and degenerative (ageing) processes.

14. A pharmaceutical composition comprising an extrudate according to claim 12.

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